

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/884,674

Filing Date: June 19, 2001

Title: SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE MEASUREMENT TECHNIQUES TO FIND THE FASTEST SOURCE

Page 2

Dkt: 884,441US1

**IN THE CLAIMS**

Please amend the claims as follows:

1. (Currently Amended) A method for managing a plurality of sources comprising:  
selectively determining an empirical measurement of a performance of each of the  
plurality of sources according to a size of data to be obtained from at least one of  
the plurality of sources;  
~~the determining including obtaining an empirical measurement of a throughput speed of~~  
~~each of the plurality of sources from at least one third party source;~~  
selecting a source in reference to the empirical measurements of the performance of each  
of the plurality of sources ~~and the at least one third party source;~~ and  
initiating a download of data ~~[[to]]~~ from a download source of the plurality of  
sources.
2. (Cancelled)
3. (Original) The method of claim 1, wherein the determining further comprises:  
obtaining an empirical measurement of a throughput speed of each of the plurality of  
sources from a local source.
4. (Original) The method of claim 1, wherein the performance further comprises a  
throughput speed.
5. (Original) The method of claim 1, wherein the performance comprises latency.
6. (Previously Presented) The method of claim 5, wherein the determining the empirical  
measurement further comprises:  
measuring the elapsed time of a transmission involving each of the plurality of sources.

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/884,674

Filing Date: June 19, 2001

Title: SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE MEASUREMENT TECHNIQUES TO FIND THE FASTEST SOURCE

Page 3

Dkt: 884.441US1

7. (Previously Presented) The method of claim 5, wherein the determining the empirical measurement further comprises for each of the plurality of sources:
- recording transmission time from the current time and date;
  - initiating a transmission to a download source of the plurality of sources;
  - receiving a response to the transmission from the source;
  - recording the receipt time from the current date and time; and
  - determining the throughput speed of the source from the difference between the receipt time and the transmission time.
8. (Currently Amended) A tangible computer-accessible medium having executable instructions for managing a plurality of sources, said executable instructions capable of directing a processor to perform:
- selectively determining an empirical measurement of a throughput speed of each of the plurality of sources according to a size of data to be obtained from at least one of the plurality of sources;
  - ~~the determining including obtaining an empirical measurement of the throughput speed of each of the plurality of sources from at least one third party source;~~
  - selecting a source in reference to the empirical measurements of the throughput speed of each of the plurality of sources ~~and the at least one third party source~~; and
  - initiating a download of data ~~[[to]]~~ from a download source of the plurality of sources.
9. (Original) The medium of claim 8, wherein the throughput speed further comprises a download speed.
10. (Original) The computer-readable medium of claim 8, wherein said instruction for determining further comprises an instruction capable of directing the processor to perform:
- measuring a throughput speed of each of the plurality of sources.

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/884,674

Filing Date: June 19, 2001

Title: SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE MEASUREMENT TECHNIQUES TO FIND THE FASTEST SOURCE

Page 4

Dkt: 884.441US1

11. (Original) The medium of claim 10, wherein said instruction for measuring further comprises instructions capable of directing the processor to perform for each of the plurality of sources:

- recording transmission time from the current time and date;
- initiating a transmission to a download source of the plurality of sources;
- receiving a response to the transmission from the source;
- recording the receipt time from the current date and time; and
- determining the throughput speed of the source from the difference between the receipt time and the transmission time.

12-18. (Canceled)

19. (Currently Amended) The medium of claim [[18]] 8, wherein the download source further comprises a source in a peer-to-peer network.

20. (Currently Amended) The medium of claim [[18]] 8, wherein said instruction for determining further comprises instructions capable of directing the processor to perform:

- recording transmission time from the current time and date;
- initiating a transmission to a download source of the plurality of sources;
- receiving a response to the transmission from the source;
- recording the receipt time from the current date and time; and
- determining the round-trip timing of the download source from the difference between the receipt time of the response and the transmission time of the transmission.

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/884,674

Filing Date: June 19, 2001

Title: SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE MEASUREMENT TECHNIQUES TO FIND THE FASTEST SOURCE

Page 5

Dkt: 884.441US1

21. (Currently Amended) A computerized method for managing a plurality of sources comprising:

obtaining a list comprising a plurality of identification of sources;  
initiating a plurality of socket connections, the plurality of socket connections further comprising one socket connection for each of the plurality of sources, yielding a plurality of initiated socket connections;  
the initiating including selectively obtaining an empirical measurement of ~~a throughput speed performance~~ of each of the plurality of sources ~~from at least one third party source~~ according to a predetermined file size;  
receiving a response for the each of the plurality of initiated socket connections, yielding a plurality of responses;  
selecting ~~the fastest~~ a source of the plurality of sources in reference to ~~[[a]] the empirical measurement of performance predetermined file size and in reference to the plurality of responses and to the plurality of sources from the at least one third party source~~; and  
initiating a download of data ~~[[to]]~~ from a download source of the plurality of sources.

22. (Original) The computerized method of claim 21, wherein the predetermined file size is less than a predetermined threshold file size and wherein the selecting further comprises:

selecting the source associated with the response that is received first.

23. (Original) The computerized method of claim 21, wherein the predetermined file size is greater than a predetermined threshold file size and wherein the selecting further comprises:

measuring the latency of each of the plurality of sources; and

selecting a source in reference to the download speed of each of the plurality of sources.

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/884,674

Filing Date: June 19, 2001

Title: SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE MEASUREMENT TECHNIQUES TO FIND THE FASTEST SOURCE

Page 6

Dkt: 884.441US1

24. (Previously Presented) The computerized method of claim 23, wherein measuring the latency further comprises:
- storing the time and date of each of the plurality of initiating socket connections;
  - storing the time and date of each of the plurality of responses; and
  - determining the download speed of each of the plurality of sources from the differences in time between the time and date of each of the plurality of the responses and the time and date of each of the plurality of the initiating socket connections.
25. (Currently Amended) A system for managing sources in a peer-to-peer network comprising:
- a processor;
  - software means operative on the processor for selectively determining an empirical measurement of a throughput speed of each of the plurality of sources according to a size of data to be obtained from at least one of the plurality of sources;
  - the software means including obtainer means to obtain [[an]] the empirical measurement of a throughput speed of each of the plurality of sources from at least one third-party source;
  - the software means selecting a source in reference to the empirical measurements of the throughput speed of each of the plurality of sources and the at least one third-party source; and
  - a transmitter to initiate a download of data [[to]] from a download source of the plurality of sources.
26. (Original) The system of claim 25, wherein the throughput speed further comprises a round-trip time.
27. (Original) The system of claim 25, wherein the throughput speed further comprises a latency.

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/884,674

Filing Date: June 19, 2001

Title: SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE MEASUREMENT TECHNIQUES TO FIND THE FASTEST SOURCE

Page 7

Dkt: 884,441US1

28. (Currently Amended) A computerized system comprising:
- a determiner of an empirical measurement of a throughput speed of each of the plurality of download peer-to-peer network sources;
  - the determining including selectively obtaining an empirical measurement of a throughput speed of each of the plurality of sources from at least one third-party source according to a size of data to be obtained from at least one of the plurality of download peer-to-peer network sources;
  - a selector of a source in reference to the empirical measurement of the throughput speed of each of the plurality of peer-to-peer network sources and the at least one third-party source; and
  - a transmitter to initiate a download of data [[to]] from a download source of the plurality of peer-to-peer network sources.
29. (Previously Presented) The computerized system of claim 28, the determiner further comprising:
- a transmitter to transmit a message to a download source of the plurality of sources;
  - a recorder of the time of a transmission of a message, operably coupled to the transmitter;
  - a receiver of a response to the transmission from the source, operably coupled to the transmitter;
  - a recorder of the time of receipt of a response; and
  - a determiner of the throughput speed of the source, from the difference between the receipt time and the transmission time.
30. (Original) The computerized system of claim 28, wherein the:
- the message further comprises a TCP/IP synchronized idle message; and
  - the response further comprises a TCP/IP acknowledgment message.